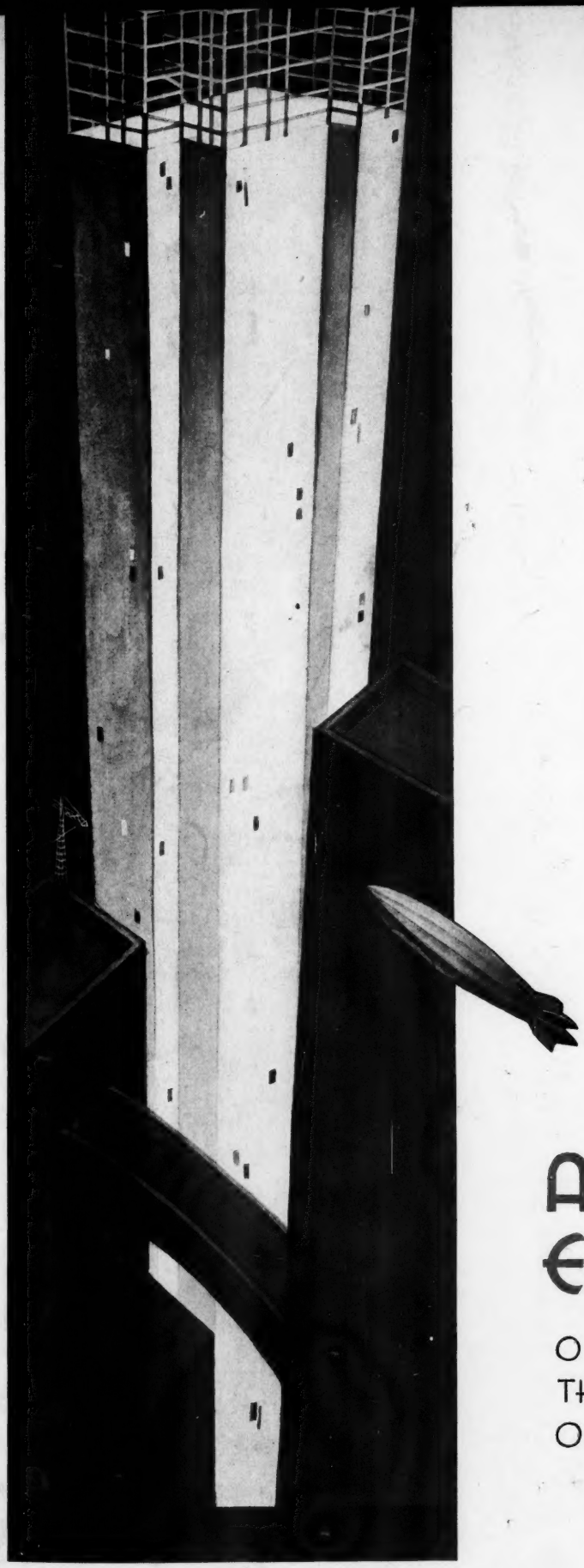

The AMERICAN ENGINEER

OFFICIAL PUBLICATION
THE NEW YORK STATE SOCIETY
OF PROFESSIONAL ENGINEERS

MARCH + + + 1932

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OF
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Arthur V. Sheridan, Editor

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ENGINEERS' LEGISLATION PASSED

Architects' Measures Also Approved

GOVERNOR SIGNS!

The Engineers' and Architects' Laws signed March 29th.

The successful passage of the companion legislative measures, amending the existing Architects' Registration Law and Engineers' License Law, places the responsibility for the public welfare, as it may be affected by the co-operation of architects and engineers in protecting life, health and property, squarely up to Governor Roosevelt. Upon his approval or veto may depend the future relations between the professions of architecture and engineering. Every architect and every engineer should petition the Governor to place his signature to the legislation and thus allow the manifest desire of both professions, the Legislature and the State Department of Education to become law upon the statute books of the State.

With the signing of these measures will end what is perhaps the most unusual, the most acrimonious and the most unnecessary controversy in the history of professional practice legislation. True, the Multiple Dwelling Act remains to be amended, but with the friendly and ethical relations established in jointly sponsoring the legislation amending the existing Practice Acts, and the pledges voluntarily extended by the architects' group, the removal next year of the discrimination embodied in the said Multiple Dwelling Act appears at this writing to be assured. In fact there now exists a possible conflict which would make amendments necessary in order to preserve the constitutionality of all the measures involved.

Future co-operation between architects and engineers suggests the benefit that can be derived from the existence and enforcement of laws primarily intended for the protection of the public. Both laws have been strengthened with a view to eliminating misinterpretation and facilitating administration. The Architects' Registration Act becomes a License Law. This is a desirable change for while registration may sound better than licensing it is hardly significant enough and tends to lessen the effectiveness of the Law. From the viewpoint of language, registration is not synonymous with nor equivalent to licensing. One suggests enrollment,—the other authority.

Portions of both Acts appear elsewhere in this issue and should be carefully studied by engineers. In substance both professions are placed on an equal basis before a client, corporation, municipality or the State. Either the architect or engineer may accept a commission as a principal and retain the services of the other on any project covered by the definitions set forth in the respective laws. The argument advanced that members of either profession would attempt work outside the province of their qualification will now be tested. One can wager that the transgression will be negligible. In fact there never was any justification for such a contention.

The next step in legislation should be a joint campaign to incorporate in both laws provision for the establishment of codes of ethics and practice, the violation of which would be grounds for review, discipline and possible disbarment from practice. There is little doubt that the engineer stands ready to sponsor such a measure and it is to be hoped that the architect will lend himself to the passage of similar legislation affecting the practitioners of his profession.

That there remains considerable room for further improvement in the Engineers' Law is admitted by all. However, a problem that troubled the profession for the past three years has been

(Continued on Page 12)

AMENDED LICENSE LAWS

Excerpts from Architects and Engineers Acts

The most important sections of the Amended Practice Acts regulating the professions of Architecture and Engineering in this State (which Acts still await the Governor's signature to become laws) are herewith published.

Lack of space precludes reproducing the entire Acts.

AN ACT

To amend the Education Law, in Relation to the Practice of Professional Engineering and Land Surveying.

Article 55

Engineers and Surveyors

Section 1449. Definitions.

Section 1450. Licensed professional engineers and land surveyors, etc., etc., etc., etc.

Section 1449. Definitions. As used in this article.

1. "Department" means the education department of the State of New York.

2. "Regents" means board of regents.

3. "Board" means the state board of examiners of professional engineers and land surveyors of the State of New York.

4. "Professional engineer" means a person who engages in the practice of professional engineering as hereinafter defined.

5. "Land surveyor" means a person who engages in the practice of land surveying as hereinafter defined.

6. A person practices professional engineering, within the meaning and intent of this article, who holds himself out as able to perform, or who does perform any professional service, such as consultation, investigation, evaluation, planning, design, or responsible supervision of construction or operation, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects, wherein the safeguarding of life, health or property is concerned or involved, when such professional service requires the application of engineering principles and data.

7. A person practices land surveying within the meaning and intent of this article who surveys areas for their correct determination and description, and for conveyancing, or for the establishment or re-establishment of land boundaries and the plotting of lands and subdivisions thereof.

Section 1450. Licensed professional engineers and land surveyors. In order to safeguard life, health and property, any person practicing or offering to practice professional engineering or land surveying in this State shall hereafter be required to submit evidence that he or she is qualified so to practice, and shall be licensed as hereinafter provided. It shall be unlawful for any person to practice or to offer to practice professional engineering or land surveying in this State or use the title professional engineer or land surveyor or any title, sign, card or device to indicate that such person is practicing professional engineering or land surveying or is a professional engineer or land surveyor, unless such person has been duly licensed under the provisions of this article.

Every holder of a license shall display it in a conspicuous place in his principal office, place of business or employment.

Every licensed professional engineer or land surveyor may have a seal, approved by the board, which shall contain the name of the professional engineer and the words "Licensed Professional Engineer" or the name of the land surveyor and the words "Licensed Land Surveyor" and such other words or figures as the board may deem necessary. All plans, specifications, plats and reports prepared by or under the supervision of such licensed professional engineer or land surveyor shall be stamped with said seal when filed with public officials. No official of this State, or of any city, town or village therein, now or hereafter charged with the enforcement of laws, ordinances or regulations relating to the construction or alteration of buildings or structures, shall accept or approve any plans or specifications that are not stamped with the seal of a licensed architect or licensed professional engineer.

A license as professional engineer or land surveyor, heretofore duly issued under the laws of this State, shall serve the same purpose as, and is hereby declared to be, the license required by this article.

This article shall not be construed to affect or prevent the practice of architecture by an architect duly licensed under the laws of this state, nor to apply to any building or structure or the alteration thereto costing ten thousand dollars or less.

Section 1452. Qualifications, examinations, and fees. For license as a professional engineer evidence must be submitted that the applicant

1. Is more than twenty-five years of age;

2. Is a citizen of the United States or has legally declared his intention of becoming a citizen;

3. Is of good moral character;

4. Has satisfactorily completed an approved four year high school course or the equivalent thereof as determined by the department;

5. Has had eight years or more of practical experience in professional engineering work of a grade and character satisfactory to the board;

6. Has passed the prescribed examinations.

(Continued on Page 9)

A NATIONAL BUREAU OF REGISTRATION

Report of Committee of National Council

THE AMERICAN ENGINEER has received from Mr. T. Keith Lagaré, Secretary and former President of the National Council of State Boards of Engineering Examiners, an official copy of the report of "The Committee on National Bureau of Engineering Registration."

This report sets forth in outline a comprehensive proposal which merits the support of all engineers. The recommendations are worthy of a National Council and indicate the influence which that body can wield if supported by the members of the profession.

Report of Committee on National Bureau of Engineering Registration

National Council of State Boards of Engineering Examiners

When your Committee which was appointed to work out the details of a National Bureau of Engineering Registration came together for that purpose, it soon decided that while it could go ahead on that portion of the work having to do with the issuance of a certificate of qualification which might be used as evidence in all those States requiring the registration of engineers, it also visualized that this might well be but an important detail in a far larger and more comprehensive scheme of inestimable worth to the Profession. The Committee, therefore, divides its report into two parts: first, that larger program which it deems to be of such value to the Profession; and second, the details of a National Bureau of Engineering Registration.

Certification of Qualification

Your Committee recommends that there be brought together representatives from the national engineering societies, representatives from the engineering schools, probably through the Society for the Promotion of Engineering Education, and representatives from the National Council of State Boards of Engineering Examiners, in order that there may be worked out a comprehensive program by which there may be established through the agreement of these three representatives of the Engineering Profession, a unified plan by which young men entering the Profession may proceed along the lines of technical education and professional experience, through successive stages (which they, the public and the Profession may easily recognize) advancing toward the Profession, ultimately to receive admission into the Profession with all the privileges and the status pertaining thereto.

Your Committee visualizes a national agent administered by representatives from the engineering schools, the national engineering societies and the administrators of the several State registration laws. This agent would devise the details of a progressive educational program and professional program subsequent to educational work, the objective of which would be the granting of a certificate of qualification, which certificate would provide simultaneously a very large part of those requirements imposed by the national engineering societies for membership; a very large part of those requirements imposed by the engineering schools for the granting of professional degrees; and similarly, a very large part of those requirements imposed by the several State laws for registration permitting practice. Your Committee visualizes this jointly administered body as giving consideration to not only scholastic work within the engineering schools, but as devising also a system whereby the work in the sub-professional life of the young engineer may be accorded certain credits. These credits should be recognizable by all concerned, and the accumulation of a sufficient number of which will result in the proposed certificate of admission into the Profession. Furthermore, the system should provide for those young men who, not having the advantage of training in the technical schools, may by reason of their practical work, with such broadening studies as may be considered advisable, also attain to the same end, namely, a certificate of admission into the Profession.

There is no need to draw a picture of the way in which today young men become engineers, either through the engineering schools or as a result of practical experience. The ways are diverse and the standards of attainment are variable. On the other hand, if there can be established a system of rating, by mutual understanding of the three suggested groupings, whereby engineers are recognized as such, there can be attained at once a minimum definition of the Profession recognizable by all and which can be applied as a nation-wide criterion.

In brief it is proposed that through a nationally recognized agency, there be instituted and developed a program which will consistently record the progress of the younger man from the very moment he entertains the thought of entering the engineering profession until he shall have demonstrated certain prescribed minimum requirements which will enable him to be recognized as one in

(Continued on Page 11)

WINTER MEETING

Albany—February 27th

One of the most successful meetings the Society has ever held took place in the Ten Eyck Hotel, Albany, on Saturday, February 27th.

Due to the splendid work of the Committee in charge, of which Edgar A. McKenna of Queens, was Chairman, and Thos. A. Devane, of Albany, Secretary, the entire program was carried out with an alacrity and smoothness seldom witnessed in such a gathering.

Members from every Chapter attended and practically every important city of the State was represented.

The Society received from the Mayor and the Chamber of Commerce of Buffalo, a very cordial invitation to hold one of its seasonal meetings in Buffalo.

A report of the legislative measures pending in the Senate and Assembly was presented in detail by President Steinman and Arnold Chapman, Chairman of the Legislative Committee. The proposed legislation was enthusiastically approved.

The statements rendered by Financial Secretary Fox and Treasurer Corry indicated that despite the present economic depression the Society has witnessed a splendid growth during the year.

Fred H. Zurmuhlen, Chairman of the Membership Committee, announced the formation of a new Chapter in Rensselaer, and another in Schenectady County. The efforts of the Albany Chapter which sponsored the formation of these two new children of the Society were acknowledged.

President Steinman and Past President Arthur V. Sheridan, Vice-Chairman of the Committee on Publicity reported on the condition of THE AMERICAN ENGINEER and called for support from the several Chapters.

Arthur V. Sheridan, Chairman of the Committee on Ethics and Practice, in submitting its report, recommended in behalf of that Committee that each Chapter be directed by the Executive Board to draft a code of practice conforming with that of the Society but suited to the Chapter needs. The Committee also recommended that at the earliest opportunity consideration be given to an amendment of the License Law, which would provide for the legal creation of codes of ethics and practice to be administered by the License Board or some other recognized authority or body. The violation of such codes would be considered grounds for review and discipline, or even possible disbarment from practice.

Over 100 persons attended the dinner in the evening which was addressed by Past President A. V. Sheridan; by Dr. Harlan H. Horner, Asst. Commissioner in charge of Higher and Professional Education; Mr. Chas. Heisler, Chief of the Bureau of Registration, and Mr. Herbert J. Hamilton, Director of Examinations, all of the State Department of Education; by Roy G. Finch, Secretary of the State Board of Licensing; Prof. Hugh Miller, of Union College, President of Schenectady Chapter; Brother Leo, Dean of the School of Engineering of Manhattan College, and President D. B. Steinman. Edward E. Sheldon, President of Albany Chapter, presided as toastmaster.

Amongst the many resolutions adopted were the following: An approval of the legislation; acknowledgments to the State Department of Education and to Dr. Horner and Mr. Heisler; to the Board of Registration for Architects, the Board of Licensing for Engineers, Senator Desmond, sponsor of the legislation in the upper house, Arnold Chapman and V. T. Boughton; disapproval of the State Personnel Reclassification Measure insofar as its abuse and misuse of the term engineer is concerned; an appeal to the Legislature to provide the funds necessary to continue public works provided for in the Budget submitted by the Governor, the cessation of which works will increase by thousands the already dangerously large army of unemployed; similar appeals to the United States Government, the State of New York, and the municipalities throughout the State; a request to continue investigations necessary to properly allocate the natural water supply resources in Nassau and Suffolk Counties, which the City of New York proposed to tap; a request to provide the funds necessary to continue stream gauging, half the cost of which is borne by the United States Government.

The most controversial matter to come before the meeting was a proposal to have a special committee report on the merits of developing the inland New York State canal waterway route and the canalization of the St. Lawrence River. A motion to table the proposal was carried and the subject set aside for possible consideration at the annual meeting.

The meeting closed with the presentation by Arthur V. Sheridan, Chairman of the Committee on Resolutions, of the following acknowledgment of the services rendered by President Steinman and an appeal to him to carry on his splendid leadership:

"During the past few years the profession of engineering has been accorded a recognition never before realized in any period of American history.

"The professional engineer today occupies an increasingly respected position in the eyes of his fellow citizens. In the accoomplishment of this development, unparalleled by that of any other profession, the State of New York has played the

(Continued on Page 14)

CHAPTER IMPRESSIONS

Resulting from a Visit to Central and Western New York

At the request of the Executive Board the Editor recently undertook a trip across the State. A series of one night stands and addresses which began with a stop over at Albany and ended in a midnight departure from Buffalo called to mind the barnstorming days of troupers a few years back. Railroads, hotels and performances (in this case addresses), packing and unpacking, hurried pressing of clothes, meals on the run, nights spent in soliloquizing, philosophizing and preparing for the next day, and, just as one is about to appreciate the varied attractions of his present place of camping out, the schedule compels him to move on to the next stop. O me miserrime.

Some reflections born of observations follow:

Albany has become a magnet for all engineers of this state. Let us hope it will one day become a Mecca for them. To arrive there is easy of accomplishment. To leave it is quite another story. One can never tell when or where he is likely to meet Arnold Chapman, Roy Finch, Harry Hays, Charlie Vanneman, Ed Sheldon, Tom Devane and others of the Capitol City as well as such distinguished visitors as Dr. Hooker of Buffalo, Dr. Steinman of New York and many more whose presence is frequently required in the Administrative and Legislative councils of the State.

The more one sees of Albany the more he is impressed with the fact that it is there the Headquarters of the Society should be permanently located, and the sooner the change is made, the sooner will the effectiveness of the Society become apparent to engineers and to legislators.

Utica is a city of homes that has produced some famous men of state and even national repute. The halos that surrounded Roscoe Conkling, Horatio Seymour and Francis Kernan still hover about the inviting atmosphere of the pride of Oneida County. It is difficult to mention Utica without thinking of Rome and Illion. Harold Rice, President of Oneida Chapter, and that genial dispenser of good cheer, Charlie Kiehm, make one wish to linger in the midst of the county that contains so many reminders of antiquity's famous centers of civilization.

The influence of the Chapter is spreading and from the promises given at the meeting one is justified in hoping for splendid results from the statewide membership campaign, which that most capable and energetic President of Richmond Chapter, Fred Zurmuhlen, Chairman of the State Committee, is conducting. When in Oneida look up Harold Rice or Charlie Kiehm.

One is impressed with the metropolitan and cosmopolitan appearance of Syracuse. As was true with its ancient ancestor, the engineer is much in evidence in its public and private structures and other engineering works. It is a worthy contributor to the shrine of the venerable Archimedes.

The Chapter is developing splendidly and the existence of that great center of learning and training for Engineers, the University which bears the name of the city, offers a fertile field for spreading the principles and accomplishments which justify the development of the New York State Society.

Charlie Keating, Bill Kavanaugh, Professor Al Acheson and the other members of the thoroughly human group of engineers who are directing the activities of the Chapter justify fond hopes for one of the State's great centers of engineering activities. Through Professor Acheson, whose promised article for THE AMERICAN ENGINEER is anxiously awaited, and a special recently appointed committee, it is hoped that news of Onondaga Chapter will appear in every future issue of the Society's publication.

When one visits Rochester he finds a desire to linger. The kindly, gentlemanly figure of Charlie Marvin so strongly commends him, not only as an engineer but as a citizen ever considerate of his fellow man, that one finds his faith in mankind somewhat strengthened.

Rochester is one of the country's real progressive cities. A recently constructed bridge has been selected as an outstanding example of beautiful arch construction. For many years its sewer and sewage treatment works have been referred to for information and data by engineering authorities throughout the country.

The Monroe County Chapter has had a 100% increase in membership during the past year and the public recognition accorded its activities is a most promising indicator of future possibilities. Gloster Havenor is not only an excellent host but a capable publicity man.

The Metropolis of western New York is but one of the several titles bestowed upon the great city adjacent to Lake Erie and the famous falls of Niagara. Buffalo offers about everything that any city could and the engineer finds much to interest him.

Fletcher Burke and John Feigel will sell you the attractions of their city and take several days to do it if you have the time.

The Erie County Chapter, which has been the least active of all the Society's children succeeded in producing a turnout that competed with that which listened to an address on "Worldly Conditions" by Stanley Baldwin, the British statesman, delivered in an adjacent hall of the University Club. The writer believes that Erie will shortly have a strong and much needed Chapter of the State So-

(Continued on Page 14)

INTERNATIONAL ASSOCIATION FOR BRIDGE AND STRUCTURAL ENGINEERING

First Congress—Paris

May 19th–25th, 1932

Under the Patronage of the President of the French Republic and the official Patronage of the French Government

At the request of the Secretary of the International Association for Bridge and Structural Engineering THE AMERICAN ENGINEER publishes the following report concerning the first International Congress of the Association which will take place in Paris, France, during May, 1932.

"The first Congress of the International Association for Bridge and Structural Engineering will be held in Paris on May 19th-25th this year. The Association has succeeded in obtaining the assistance of some of the best-known figures in the world of science and engineering to introduce the discussions on the various questions contained in the Congress programme. The Congress itself comprises an opening meeting, seven meetings devoted to actual work, and a concluding meeting at which the resolutions arrived at in the course of the discussions will be summed up.

The programme of the Congress has been so arranged that those attending will be enabled to participate in the discussion of questions dealing both with steel construction and with reinforced concrete. For each of the eight themes to be handled various papers have been prepared, and these will be published in full in the "Preliminary Report," which will be forwarded to all participants in the Congress. The speakers themselves will give only a short summary of their work at the meetings.

Participants in the Congress who also wish to take an active part in the discussions, are requested to communicate with the General Secretaries of the International Association for Bridge and Structural Engineering. The time alloted to each speaker will be strictly limited in accordance with the amount of time at the disposal of the Congress for the respective discussion.

The following themes constitute the programme of the Congress:

I. *Stability and strength of structural members subjected to compression and bending.*

(1) Introductory Report. (Prof. Dr. L. Karner, Zurich).

(2) Question of the buckling of straight bars with noncentral or transverse loading. (Prof. Dr. Ros, Zurich).

(3) The buckling of the webs of members subjected to compression. (Dr. F. Bleich, Vienna).

(4) The buckling of the webs of plate girders subjected to bending. (Professor S. Timoshenko, Ann Arbor).

II. *Slabs in reinforced concrete structures.*

(1) Introductory report. (Prof. Dr. M. Ritter, Zurich).

(2) Rectangular slabs, supported on all sides. (Prof. Dr. Gehler, Dresden).

(3) "Mushroom" systems. (Prof. Dr. Huber, Warsaw).

(4) Slabs and structures with thin partitions. (Dr. W. Petry, Obercassel-Siegkreis).

III. *Welding in steel structural work.*

(1) General report. (Prof. T. Godard, Pau).

(2) Strength, calculation and structural form of welded steel constructions. (Dir. Dr. Kommerell, Berlin).

(3) Experience gained in practice (including economy effected). (Dir. L. Kopecek and Dr. Ing. F. Faltus, Plzen).

(4) Combination of riveted and welded connections. (Prof. H. Dustin, Bruxelles).

IV. *Large girder bridges in reinforced concrete.*

(1) General report. (Henry Lossier, Argenteuil).

(2) Special Structures. (Dr. Ing. e. h. Spangenberg, Prof. München).

(3) Special Structures. (Ministerialrat M. Gombos, Budapest).

V. *Dynamics of bridges.*

(1) General report. (Reichsbahnoberrat Homann, München).

(2) Apparatus for causing and for measuring vibration. (Reichsbahnrat Dr. Ing. Bernhard, Berlin).

(3) Calculation of the influence of moving loads on structures. (a) Theoretical principles of calculation. (Dr. F. Bleich, Vienna). (b) Application and experiences in steel construction. (David Cushman Coyle, New York).

VI. *Development of the statics of reinforced concrete, with regard to the properties of the material used.*

(1) Introductory report. (Prof. F. Campus, Liège).

(2) Elasticity, plasticity and shrinkage. (Dr. Oscar Faber, London).

VII. *Girders in conjunction with concrete.*

(1) Introductory report. (Prof. L. Santarella, Milan).

(2) Composite columns. (Steel supports surrounded by concrete or by reinforced concrete). (Oberbaurat Dr. techn. e. h. F. v. Emperger, Vienna).

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Amended License Laws

(Continued from Page 4)

For license as a land surveyor evidence must be submitted that the applicant

1. Is more than twenty-one years of age;
2. Is a citizen of the United States or has legally declared his intention of becoming a citizen;
3. Is of good moral character;
4. Has satisfactorily completed an approved four year high school course or the equivalent thereof as determined by the department;
5. Has had six years or more of practical experience in land surveying work of a grade and character satisfactory to the board;
6. Has passed the prescribed examinations.

Examinations for license as professional engineer and as land surveyor shall be held by the department twice each year in at least three convenient places in the State. Subject to the approval of the department, the board shall determine the subjects and scope of the examinations. Notwithstanding anything herein contained every applicant for license as professional engineer, otherwise required to take an examination, shall be required, in addition to all other requirements, to establish by written examination his competency to plan, structurally design and supervise the construction of buildings and similar structures. (Note! This identical sentence appears in Section 1478 of the Architects' Act). Each written examination may be supplemented by such oral examination as the department shall determine upon recommendation of the board.

The department on the recommendation of the board may waive specific qualification requirements, except as to age, character and citizenship, in the cases of applicants who are possessed of long established and recognized standing in the engineering profession, who have practiced lawfully for more than twelve years, or who were actively engaged in the practice of professional engineering or of land surveying in this State for at least four years prior to May fourteenth, nineteen hundred twenty.

Prior to January first, nineteen hundred thirty-seven, the board may exempt from all or any part of the examination, a graduate of a college or school of engineering registered by the department as maintaining satisfactory standards. Each complete year of study in such registered college or school of engineering may be accepted in lieu of one year of experience.

Upon recommendation of the board and the payment of a fee of twenty-five dollars, the department may issue a temporary permit to practice professional engineering to an engineer who is not a citizen of the United States and who has not declared his intention of becoming a citizen but who submits satisfactory evidence of established and recognized professional standing in his own country and who submits certification as to character and qualifications from at least two duly licensed professional engineers of this State. Such temporary permit shall entitle the holder to practice professional engineering in this State but only in connection with the specific project for which it is granted, and shall be subject to the same restrictions regarding annual registration and revocation as a license issued as otherwise provided by this article. The annual printed list shall include a separate list of the persons to whom such temporary permits have been granted.

The fee for a license as a professional engineer shall be twenty-five dollars, and the fee for a license as land surveyor shall be ten dollars.

If an applicant fails to obtain a license as a result of his first application or examination he may make a second application and may be admitted to a second examination without the payment of an additional fee.

Upon the recommendation of the board the department may exempt from examination an applicant for license as professional engineer who holds a license or certificate to practice professional engineering issued to him upon examination by a legally constituted board of examiners in any other State or political subdivision of the United States or who holds a certificate of qualification issued by the national council of state boards of engineering examiners provided the requirement for such license or certificate was the full equivalent of the requirement in this State at the time it was issued and provided, further, that the applicant's record fully met the requirement of this State in all respects other than examination.

Every person applying subsequent to January first, nineteen hundred thirty-seven, for a license as professional engineer, shall be required to pass the examination and before admission thereto shall submit evidence that he has graduated from a college or school of engineering registered by the department as maintaining satisfactory standards. He shall also submit before admission to the examination evidence of practical experience in professional engineering work of a grade and character satisfactory to the board. Each complete year of study in the registered college or school of engineering may be accepted in lieu of one year of such experience and the applicant must submit evidence of sufficient additional experience to give him a total of eight years. In lieu of such graduation, an applicant may be admitted to the examination upon presenting evidence of at least twelve years of practical experience in professional engineering work of a grade and character satisfactory to the board.

Section 1455. Penalties. It shall be a misdemeanor for any person to

1. Practice or offer to practice or hold himself out as entitled to practice professional engineering or land surveying unless duly licensed and registered and except as provided in section fourteen hundred and fifty-seven of this article.
2. Present or attempt to file as his own the license of another.

3. Give false or forged evidence to the board or any member thereof in obtaining a license.

4. Falsely impersonate any other practitioner, of like or different name.

5. Use or attempt to use a license that has been revoked.

6. Otherwise violate any of the provisions of this article.

Such misdemeanor shall be punishable by a fine of not less than one hundred and not more than five hundred dollars or imprisonment for not more than one year or both.

All courts of special sessions within their respective territorial jurisdictions are hereby empowered to hear, try, and determine, such crimes without indictment and to impose in full the punishments of fines and imprisonments herein prescribed.

Section 1456. License or certificate presumptive evidence. Every unrevoked license issued as provided in this article shall be presumptive evidence in all courts and places that the person named therein is legally licensed and every certificate of annual registration shall likewise be presumptive evidence that the person named therein is legally registered for the period for which it is issued.

Section 1457. Exemptions. The following shall be exempted from the provisions of this article:

1. Offering to practice in this State as a professional engineer or land surveyor by any person not a resident of and having no established place of business in that State.

2. Practice as a professional engineer or land surveyor in this State by any person not a resident in this State and having no established place of business in this State, when such practice does not aggregate more than thirty days in any calendar year provided that said person is legally qualified for such professional service in his own State or country.

3. Practice as a professional engineer or land surveyor in this State by any person not a resident of and having no established place of business in this State, or any person resident in this State, but whose arrival in the State is recent; provided, however, such a person shall have filed an application for license as a professional engineer or land surveyor, and shall have paid the fee provided for in section fourteen hundred and fifty-two of this chapter. Such exemption shall continue for only such reasonable time as the board requires in which to consider and grant or deny the said application for license.

4. Engaging in professional engineering or land surveying as an employee or pupil of or under the direction of a licensed professional engineer or a licensed land surveyor, or as an employee or pupil of or under the direction of a professional engineer or land surveyor authorized by paragraphs two and three of this section, provided that said practice may not include responsible charge of design or supervision as principal.

5. Practice of professional engineering or land surveying solely as an employee of this State or any political subdivision thereof, on May fourteenth, nineteen hundred and twenty and thereafter only until the expiration of the then existing term of office of such employee.

6. Practice of professional engineering or land surveying, by an employee of a county or town, in the construction, improvement or maintenance of a county road or town highway, or by an employee of a county, city, town or village, in the construction, improvement or maintenance of any public work wherein the contemplated expenditure for the completed project does not exceed five thousand dollars.

7. Practice of professional engineering or land surveying, solely as an officer or an employee of a corporation engaged in interstate commerce.

8. Practice of professional engineering or land surveying, exclusively as an officer or employee of a public service corporation by rendering to such corporation such service in connection with its lines and property which are subject to supervision with respect to the safety and security thereof by the public service commission of this State, the interstate commerce commission or other federal regulatory body and so long as such person is thus actually and exclusively employed and no longer.

9. Any person licensed as an architect under the laws of this State except that such person shall not use the designation engineer or engineering unless licensed under the provisions of this article.

Section 1458. Conviction and prosecution of offenders. All violations of this article when reported to the department and duly substantiated by affidavits or other satisfactory evidence shall be investigated by it and if the report is found to be true and the evidence substantiated the department shall report such violation to the attorney-general and request prompt prosecution.

The regents may appoint inspectors for the purpose of enforcing the provisions of this article and their salaries and expenses shall be paid from the funds derived from the operation of this article.

All officials of any city, town or village, in this State now or hereafter charged with the enforcement of laws, ordinances or regulations relating to the practice of professional engineering or land surveying shall, under the direction of the regents, assist the regents in the enforcement of this article.

AN ACT

To Amend the Education Law, in Relation to the Practice of Architecture.

Article 56

Architects

Section 1475. Definition.

Section 1476. Licensed architects

Etc., etc., etc., etc., etc.

5. "Architect" means a person who engages in the practice of architecture as hereinafter defined.

6. A person practices architecture within the

meaning and intent of this article, who holds himself out as able to perform or who does perform any professional service such as consultation, investigation, evaluation, planning, design, including aesthetic and structural design, or responsible supervision of construction, in connection with any private or public buildings, structures or projects, or the equipment or utilities thereof, or the accessories thereto, wherein the safeguarding of life, health or property is concerned or involved, when such professional service requires the application of the art and science of construction based upon the principles of mathematics, aesthetics and the physical sciences.

Section 1476. Licensed architects.

1. In order to safeguard life, health and property, no person shall practice architecture in this State, or use the title architect or any title, sign, card or device to indicate that such person is practicing architecture or is an architect, unless such persons shall have secured from the regents a license as architect, in the manner hereinafter provided, and shall thereafter comply with the provisions of this article.

2. This article shall not be construed to affect or prevent the practice of engineering by a professional engineer duly licensed under the laws of this State nor to apply to any person licensed as a professional engineer in this State except that such person shall not use the designation architect or architecture unless licensed under the provisions of this article; nor to apply to any building or structure or the alteration thereto costing ten thousand dollars or less; nor to prevent the preparation of details and shop drawing by persons, other than architects, for use in connection with the execution of their work; nor to prevent employees of those lawfully practicing as architects under the provisions of this article from acting under the instruction, control or supervision of their employers; nor to apply to the supervision by builders, or superintendents employed by such builders, of the construction or structural alteration of buildings or structures; provided, however, that nothing herein contained shall be construed to permit any person not licensed as provided in this article to use the title architect, or any title, sign, card or device to indicate that such person is practicing architecture.

No official of this State, or of any city, town or village therein, now or hereafter charged with the enforcement of laws, ordinances or regulations relating to the construction or alteration of buildings or structures, shall accept or approve any plans or specifications that are not stamped with the seal of a licensed architect or a licensed professional engineer.

A National Bureau of Registration

(Continued from Page 5)

possession of those qualifications which all would desire to see in engineers.

The thought is possible of detailed elaboration, but if it be viewed sympathetically, the advantages to be attained are easily recognizable and there remains but the desire to attain the objective, the active co-operation of the several parties at interest, and the working out of the method of procedure toward the common end of affording the young man the opportunity of periodically recognizing his own stage of development.

This thought your Committee has taken the liberty of communicating to the other units which should be interested, namely, the Society for the Promotion of Engineering Education, and the national engineering societies through the agency of the American Society of Mechanical Engineers, which it understands has already inaugurated a process looking toward a progressive educational program. It has further informed these bodies that the National Council of State Boards of Engineering Examiners has already initiated and is about to put into effect a National Bureau of Engineering Registration, which your Committee believes will perform part of the function proposed in the larger scheme, namely, that part applicable to the permission to practice engineering as prescribed by law, and has suggested that if and when the larger scheme shall have been consummated, this Bureau can be absorbed into the larger scheme with effectiveness, to the advantage of both the larger program and the legal phase of it.

National Bureau of Engineering Registration

Holding in mind what is herein proposed as a larger program, and holding in mind also the requirements of the legal phase of registration of engineers, your Committee proposes the establishment of a National Bureau of Engineering Registration in the following manner:

PURPOSE—The purpose of the National Bureau of Engineering Registration shall be to investigate and verify the records of applicants and issue to those who fully comply with the regulations and requirements adopted by the Bureau a "Certificate of Qualification," which may be used as evidence of qualification—for registration as a professional engineer in those states agreeing to recognize said certificates, for membership in national and state engineering societies, in connection with award of professional degrees by engineering colleges, for presentation to clients when soliciting contracts for professional services, for presentation to employers when applying for positions, etc.

ADMINISTRATION—As provided for in the resolution of the National Council of State Boards of Engineering Examiners the National Bureau of Engineering Registration will be administered by a Committee of three, appointed annually by the President of the National Council, due consideration being given to the desirability of continuity of terms, and this Committee will be assisted by an advisory board of representatives of national

engineering societies. The Committee shall formulate and adopt regulations for the administration of the Bureau including—standard requirements for registration, information required of applicants, examinations, issuance of certificates, copies of records, collection of fees, etc. Applicants shall be required to furnish information relative to, and certificates will show rating on, education, professional experience, membership in national engineering society, registration with State Board, and technical examination. When examination is required, it shall be in accordance with regulations approved by the Bureau, shall be conducted by examiners appointed by the Bureau and held at such place as may be designated in the state of which the applicant is a resident. Applications shall be rated and approved by the Executive Secretary except in complicated cases, which will be submitted to the Committee. The Secretary of the National Council shall be the Executive Secretary of the Bureau and will be in active charge of the work of the Bureau, serving under the direction of and at the pleasure of the Committee, at a salary fixed by the Committee. An annual report of the activities of the Bureau shall be submitted to the National Council.

FINANCE—Funds for maintaining the Bureau shall be derived from fees received from applicants, the charges for the services of the National Bureau of Engineering Registration to be as follows:

Investigating record and issuing certificate of qualification.....	$10.00
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The funds of the Bureau shall be kept in a national bank in the name of the National Bureau of Engineering registration. The Executive Secretary shall be under a surety bond, the amount to be fixed by the Committee and the premium to be paid from funds of the Bureau. An audit of the accounts of the Bureau is to be made annually by a Certified Public Accountant.

LOCATION—In order to operate the Bureau at a minimum cost the offices of the National Bureau of Engineering Registration shall be located in Columbia, South Carolina, in connection with the present offices of the Secretary of the National Council of State Boards of Engineering Examiners. The Committee is of the opinion that when the activities of the Bureau develop sufficiently it may be advisable to establish headquarters in Washington, D. C.

This report was adopted at a meeting of the Committee which was appointed by the President of the National Council of State Boards of Engineering Examiners at the Detroit Convention, October 1-3, 1931, to work out a plan for the establishment of a National Bureau of Engineering Registration. This meeting was held January 23, 1932, in the Engineering Societies Building, New York City, the following being present: Hugh A. Kelly, Chairman; H. D. Mendenhall; D. B. Steinman, President; T. Keith Legaré, acting as Secretary of the Committee; and G. T. Seabury, representing the American Society of Civil Engineers.

The Committee is of the opinion that the establishment of the Bureau should not be postponed until the 1932 Convention next fall, therefore, a copy of this report is being submitted to each State Board Member of this Council and unless serious objections develop this committee will proceed with arrangements for the operation of the Bureau.

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The Committee of which Hugh A. Kelly, of the New Jersey State Society of Professional Engineers is Chairman, is to be congratulated for its constructive proposals.

The efforts of the National Council, whose presiding officer is President Steinman of the New York State Society and to which the New York State Board of Licensing now belongs, merit an expression of approval and THE AMERICAN ENGINEER hopes in a later issue to elaborate upon these efforts.

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THE POWER OF WATER

Some Reflections by Government Official

The News of Harrisburg, Penna., recently carried the following interesting commentary on Hydraulics. Such articles in the public press stimulate appreciation by the public, of the forces and laws with which the engineer works and attract attention to his responsibility and to the necessity for regulation and for legal restriction of engineering practice.

Few Devotees of Hydraulics

Washington, D. C.—In spite of the fact that the American people lead in invention, more patents being taken out in a year in the United States than in all the other countries of the world combined, one of the most important branches of mechanical science has few devotees. It is the science of hydraulics. H. N. Eaton, acting chief of the Hydraulic Laboratory Section of the National Bureau of Standards at Washington, points out that out of the 120,000 engineers in the United States there are only 5,000 hydraulic engineers.

Hydraulic engineering is a science which dates back to early antiquity. While the almost prehistoric Egyptians engaged in hydraulic engineering, probably the most famous early professor was Archimedes whose experimentation in ancient Syracuse discovered many fundamental principles.

The curious powers of water attracted thoughtful men among the ancients and Mr. Eaton is surprised that more young men of today have not been fascinated by the lure of the dynamic forces of fluids. Water has the strange property of constituting a dynamic force whether flowing or at rest.

Applied Pressure

Hydraulic pressure, most potent of all applied pressures, is exerted by still, not flowing water. The mere presence of water, funnelled down so that a base narrower than its surface bears on a given place, is sufficient to exert a tremendous force.

Moving water doubtless first attracted the ancients. Walking beside the still waters of a pond or sluggish stream which scarcely seems to move, an idea of tranquillity is imparted. Nevertheless, a tremendous force is being exercised by the slightest movement.

It is the science of hydrodynamics or hydraulic engineering which discovers and measures these forces and harnesses them to usefulness in the service of mankind. The United States Government and many private companies have been building dams in the United States since the earliest colonial times. The purpose of a dam is to concentrate the force generated by the normal flow of a stream. Just what this force amounts to can be illustrated simply.

Power of Small Streams

Assume a stream of fifty feet in width and with an average depth of only five feet. There are literally thousands of such streams meandering through the United States. Such a stream is scarcely navigable for any but light pleasure craft. Such a stream would be classified as of not very great economic importance. A moment's measurement, however, shows what a power is present, even if the stream be meandering at a rate of only three miles an hour which is an easy walking gait.

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If a weight is moving downward it will raise a weight slightly less than its own, only the factor of friction being subject to subtraction. Therefore, when this 250 square feet of water moves forward at the rate of 264 feet per minute a force is exerted equal to 250 times 264. This means that in the course of only sixty seconds a force of 4,114,000 pounds is being exerted. Translated, that force is the equivalent of 125 horsepower.

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Engineers' Legislation Passed

(Continued from Page 3)

eliminated and future legislative proposals can be studied with a calmer and more deliberate frame of mind. The necessity for greater consideration of legislation which directly or indirectly affects the practitioner of engineering is becoming more evident every year. Problems of an engineering nature which concern the welfare of the nation, state and municipality are all too frequently entrusted to, placed in the hands of, or decided by, persons whose lack of knowledge of engineering does in truth, and should in fact, disqualify them from consideration of the same. Upon the growth of membership and the expansion of chapter organizations depends the influence the New York State Society and the profession will in the future wield. To the accomplishment of these objectives every engineer should lend his support by membership in the Society.

To the engineering organizations who collaborated and to the architecture groups which cooperated in preparing and passing the recent legislation THE AMERICAN ENGINEER extends felicitations and best wishes. To the State Education Department, which succeeded when architects and engineers had failed the New York State Society of Professional Engineers expresses its appreciation and offers its services and facilities for administration and enforcement purposes. To Willis H. Sargent, who introduced the legislation in the assembly, THE ENGINEER says "thank you." To Senator Thos. C. Desmond, Director of the New York State Society, who sponsored both measures, the Society acknowledges its pride in his membership. To Dr. Harlan H. Horner all concerned can say—Well done thou good and faithful servant—Enter thou in the Kingdoms of both professions.

* * *

Winter Meeting

(Continued from Page 6)

leading role; in fact, has led the entire movement. Such an accomplishment would be impossible without the services of unusual leadership.

"It has been the good fortune of the New York State Society of Professional Engineers to have as its directing officer for the past two years one whose unusual accomplishments, not alone in ability to lead and in unselfish devotion to a cause whole-heartedly espoused but also as a practicing engineer second to none in America, have focused upon him and upon the New York State Society the eyes of the entire profession.

"The sacrifices made by the President of the Society have been indeed great and his services are beyond any reward save a sincere expression of gratitude and affection from the membership, and, it is with such thought as a motive, and an earnest desire as a hope, that:

"The New York State Society of Professional Engineers, in behalf of the licensed practitioners of the State, at this, the winter meeting of the Society, held in Albany, February 27, 1932, expresses its grateful appreciation, and appeals to the outstanding contributor to the social and professional welfare of engineering in this country to carry on, to a point where it may be safely entrusted to another, the destinies of the Society, which, in a few short years, has sponsored and accomplished so much for the professional engineer, and which today has twenty-two active chapters covering thirty counties of the State, all participating in this appeal to one upon whom their only claim is his unselfishness and manifest love of his profession and his fellowman."

The spontaneous demonstration which greeted this appeal was a splendid tribute to the man who is doing so much for the profession which he ornaments.

To Edward A. McKenna, Thos. J. Devane, Edward E. Sheldon, the Albany Chapter, the Albany Chamber of Commerce and others who contributed to the success of the meeting the Society makes its acknowledgments.

Ed McKenna and Tom Devane make a splendid committee on arrangements. The meeting, the dinner and ROOM 307 will be pleasantly remembered by those who were present.

* * *

Chapter Impressions

(Continued from Page 7)

ciety. The energy and capability of the engineers one meets justify the statement that an aroused interest is all that is required to develop such an organization.

The strongest impression that one gathers from a visit to the various cities of the State is the need and the field of opportunity for a local chapter. If every licensed engineer could have the opportunity that has been afforded the writer there is little doubt that every practitioner of this State would seek membership to the Society the moment he receives his license.

The chapter is the basis and the source of the strength and usefulness of the State Society. Every county should have chapter facilities and every professional engineer should not only be a member of his local chapter but should take an active part in promoting friendly relations and contacts between the chapter and the civic and professional organizations of the county wherein he resides or practices.

Chapters:- Sell yourselves to the engineers of your county as effectively as you have to your humble scribe.

THE EDITOR.

CHAPTER AND COUNTY NEWS

Schenectady County

Schenectady is the latest county to enter into the company of the "Chapter Counties" of the State.

The Chapter was organized on February 24th at the City of Schenectady. The following officers were elected: President, Prof. Hugh Miller; Vice-President, Fred W. Fisch; Secretary-Treasurer, W. C. Strecker; Directors, H. D. Schutt, F. R. Lindsey, L. B. Sebring, and W. C. Taylor.

Felicitations and best wishes are extended to the new Chapter. "May it live long and prosper."

Bronx County

The Bronx County Chapter held its annual meeting at the Concourse Plaza Hotel in The Bronx on March 3rd. The officers elected are as follows: President Prof. Alexander Haring; Vice-President, Joseph F. Lamb; Secretary, Rudolph C. Lang; Treasurer, W. L. A. Arctander; Directors for three years, W. E. Addicks, J. H. Knight, T. H. Normile, R. J. Van Wagner; Directors for two years, J. A. Briggs, S. E. Friedeberg, C. F. Giraud, E. D. Hartmann; Directors for one year, H. W. Danfield, W. G. Quirk, C. Schaefer, Jr., P. Treutler.

A most interesting illustrated lecture entitled "Observations in Persia" was delivered by Charles J. Renner, a member of the Chapter, who spent some years in the land of Omar Khayyam.

Richmond County

A testimonial dinner under the auspices of the Richmond County Chapter will be tendered to Mr. Othmar H. Ammann, Chief Engineer of the Port of New York Authority, on April 7th, at the Masonic Club, St. George, Staten Island. Engineers from the State of New Jersey and the various counties of New York City together with governmental officials and outstanding leaders of civic organizations will gather to pay honor to an engineer, who by the magnitude of his accomplishments in the field of long span bridge construction, has justly earned the title of "Pontifex Magnus."

Queens County

The Queens County Chapter sponsored a mammoth meeting of citizens to consider the necessity for the uninterrupted development of the Long Island Park System. The meeting which was held at the Town Hall in Jamaica on March 3rd was conducted by J. Franklin Perrine, President of the Queens County Chapter. Addresses were delivered by Hon. Robert Moses, President of the Long Island State Park Commission, Hon. George U. Harvey, President of the Borough of Queens, and Dr. D. B. Steinman, the ubiquitous and indefatigable President of the New York State Society. The meeting was attended by upwards of 350 prominent officials and citizens of Long Island among whom were Hon. John J. Halleran, Commissioner of Public Works of the Borough of Queens and Major Oscar Erlandsen, Chief Engineer of the Borough of Queens.

RAPHAEL J. SMYTH,
Chairman, Committee on
Chapter Activities.

NEWS ITEMS

SIDE LIGHTS OF THE WINTER MEETING

By Thos. Devane—Albany

Dr. Horner belongs in the Diplomatic Service. He is the man needed at the present time at Geneva.

John Avery came from New York to give us a lesson in proportion.

Bill Field is apparently scared of dynamite. How unusual!

Ed McKenna will have to do a lot of explaining about that stenographer.

Roy Finch knew the proper place to settle the controversy.

Arthur Sheridan had considerable business after the dinner—Schenectady Chapter please investigate.

Mr. Heisler doesn't seem to acquire many grey hairs over all the worry we have caused him.

As usual, Dr. Steinman was most gracious—that is, substantially so.

Dick Salisbury and Ben Benway surely did take care of the entrance to Room No. 307.

Charley Kiehm came all the way from Utica. He just had to have a visit with Harry Hayes.

Ray Smyth just had time to make the "sleeper."

Larry Honan is to organize a chapter in Genesee County. At least, he said so in Room No. 307. Come on, Larry, do you remember?

As a "cantinero," Len Perrin could not have been surpassed.

Arnold Chapman could hardly get his feet under the table. Tell us why, Arnold.

If Manhattan engineering students are as regular as their teacher, Brother Leo, they should make good engineers.

Some gentlemen prefer blondes, although some prefer "greys."

Any one knowing the names of those on the Nominating Committee should forward same to this office.

Col. Miller: Please read page 8 of the January issue of the "American Engineer."

Erie County Chapter will have to get busy after that very courteous invitation from the Mayor of Buffalo.

The attendance was 85% greater than that of last year.

When Ed Sheldon and Bill Davis got the Albany Chamber of Commerce in line, the success of our meeting was assured.

Latest Publication: "When Good Fellows Get Together," by Dr. Steinman and Mr. Brockway.

As a Chairman would say, "Good-Bly hearings."

At the next meeting between Ed McKenna and Pat Corry firearms will be checked at the door.

The outstanding twins in the Society are: "The Writer" and "The Speaker."

The knights of the midway from Albany learned a lesson at the New York meeting last May. Dictatorial authority has its place.

Harry Hayes and Ray Smyth were in conference until past midnight.

Where was Prof. Riedel's bodyguard?

Fred Zurmuhlen and Frank Bode had a little private hand-shaking contest.

Dr. Hochstadter's point of order caused considerable confusion. However, it was well taken.

Rochester always gets first hand information through Charley Marvin.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

Secretary Hutchinson Dies

Frederick L. Hutchinson, Secretary of the Institute, died at the Homeopathic Hospital at East Orange, N. J., on Feb. 26th.

Mr. Hutchinson, who was 65 years of age, graduated from Cornell University in 1893. He was identified with the staff of the Institute for over a quarter of a century. Amongst his other affiliations may be noted the American Association for the Advancement of Science, the American Sociological Society, the American Academy of Political and Social Science, the Engineers' Club and the Cornell Club of New York.

To the Institute and to the family of Mr. Hutchinson, the American Engineer extends the sympathies of the Professional Engineers of the State.

* * *

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Semi-Annual Meeting

The semi-annual meeting of the Society will take place at Bigwinn Inn, Ontario, Canada, the week of June 27th.

Papers will be presented by prominent authors from England, Canada and the United States. Attention is directed to the splendid opportunity afforded those who wish to plan for a vacation during June or July.

PRESIDENT STEINMAN

Receives Another Distinction

The recently organized American Toll Bridge Association has selected as its President D. B. Steinman of New York. At a meeting of the Association recently held in Camden, New Jersey, various committees were appointed and the following officers chosen:

President, D. B. Steinman, New York.

Vice-Presidents, eastern district, Joseph K. Costello, New Jersey; central district, A. C. Shinkle, Ohio; western district, Oscar H. Klatt, California.

Secretary, P. K. Schuyler, Washington, D. C.

Treasurer, Horace J. Stradley, New Jersey.

* * *

FAR HORIZONS

Alice Curtis Desmond

The wife of Senator Thos. C. Desmond, Director of the Society, is the author of a very interesting and charmingly written book on some travels and experiences of an engineer and his enthusiastic companion. It is well worth while and is recommended for pleasant and informative reading. The publisher is Robert McBride & Company, of New York.

* * *

AMERICAN ENGINEERING COUNCIL

Legislation Considered

The action taken by the Assembly of the Council on certain legislation introduced into Congress is noted with interest:

The Green bill, H. R. 6187, a bill to direct the Secretary of the Treasury to contract for architectural and engineering services in the designing and planning of public buildings, was supported with the recommendation that an effort be made to have the bill amended in certain respects.

The proposal of Congressman Hall of Mississippi, embodied in H. R. 6995, which would authorize the Secretary of the Interior to grant a moratorium on payment of construction charges on reclamation projects was condemned.

There have been introduced into Congress several bills which proposed to reorganize the public works activities of the Federal Government by creating an Administration of Public Works. After a careful analysis of these measures, the Public Affairs Committee recommended, and the Assembly approved in principle the proposal of Mr. Cochran of Missouri, chairman of the House of Representatives Committee on Expenditures in the Executive Departments, embodied in H. R. 6670. This bill states in its title that it proposes to accelerate public construction in periods of business depression through the creation of an administration of public works, and that this agency will provide for a more effective coordination and correlation of the public works functions of the Government. The view prevailed that, with certain recommended amendments, the bill was probably the best starting point for the enactment of legislation of this character which could be secured at this time. President Hoover, in his Annual Message to Congress in December, recommended legislation along this line, and both the Democratic and Republican parties have endorsed the general principle of Government reorganization, of which this is an important part.

The Senate Joint Resolution 69, sponsored by Senator King, which would provide for the establishment of an inter-departmental Committee on Conservation of Natural Resources and for the cooperation with States in the conservation of natural resources, was looked upon with favor. However, the Assembly recorded itself to the effect that the objectives of this legislation could be better realized through the creation of an administration of public works.

* * *

AMERICAN SOCIETY OF CIVIL ENGINEERS

Committee on Salaries Reports

The result of approximately 7,000 replies to a questionnaire distributed throughout the nation indicates that the average salary of the members of the Society is but slightly in excess of $4,000 per annum. Following is a comparison, which is relative rather than direct, of the average salaries as reported by committees who have studied the question during the past 20 years:

Date	Organization	Average
1915	American Society of Civil Engineers	$3,986
1919	American Engineering Council	4,032
1926	Society for the Promotion of Engineering Education	4,275
1930	American Society of Civil Engineers	4,250

Spring Meeting Omitted

The Board of Direction has definitely decided, in view of the present financial situation to omit the spring quarterly meeting of the Society, originally scheduled for Miami, Florida.

The 62nd Annual Convention will be held at Yellowstone Park during the summer months. Plans are already in progress and an interesting program will be presented to those who are able to participate in the proceedings and activities of the Convention.

International Association for Bridge and Structural Engineering

(Continued from Page 8)

(3) Composite columns and their importance to steel structures. (Dr. Ing. Hawranek, Prof. Brünn).

(4) Girders, combined with concrete or reinforced concrete, subjected to bending. (Dr. C. H. Lobban, London).

VIII. *Research concerning building ground.*

(1) Permissible loads on shallow foundations. (Prof. Dr. Ing. K. v. Terzaghi, Vienna).

The aim of the Association is to foster international cooperation between representatives of science, industry and engineering where these branches are concerned with constructions in steel, reinforced concrete or other materials. To achieve this purpose congresses will be held at intervals of from three to five years; other activities of the Association will be the publication of scientific treatises from time to time and the carrying out, either directly or indirectly, of scientific research work and practical experiments.

The management of the international Association is at present constituted as follows:

President: Prof. Dr. A. Rohn, President of the Swiss Educational Board, Switzerland. Vice-Presidents: Sir Thomas Hudson Beare, Great Britain; Dr. Ing. e. h. M. Klonne, Germany; Prof. G. Pigeaud, France. General Secretaries: Prof. Dr. L. Karner, Switzerland, for Steel Construction; Prof. Dr. M. Ritter, Switzerland, for Reinforced Concrete Construction. Technical Advisers: Dr. F. Bleich, Austria, and Prof. T. Godard, France, for Steel Construction; Prof. F. Campus, Belgium, and Dr. Ing. W. Petry, Germany, for Reinforced Concrete Construction. Secretary: Dipl. Ing. P. E. Soutter, Switzerland.

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*Carpenter, Clarence A.
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Donovan, Edward L.
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Wunsch, Joseph W.
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*Land Surveyors only.

In the February issue Frederic Drury, Jr., of Gouverneur, New York, appeared as the recipient of a license as a Land Surveyor. This was incorrect. Mr. Drury was granted a Professional Engineer's license, as well as that of a Land Surveyor. We offer our apologies.

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FOR ONCE anyway and especially during 1932, here is a matter that merits investigation. We suggest that you DO inform yourself and that you DO NOT take the stand that this is just another magazine.

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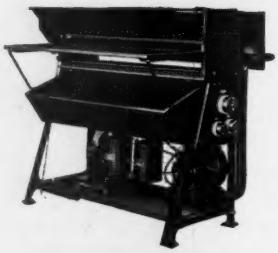
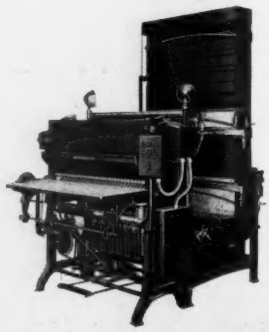
BLUE PRINTS

1885 – 1932





In **1885**, the year Kolesch & Co. started in business, Blue Prints were made in frames on the roof of their building (if the sun was shining). After exposure they were washed in trays containing the developer, the water was then pressed out by hand and the prints hung on wire string clips around the old fashioned pot bellied stove.

Later on came the Mercury Vapor Tube Blue Print Machines and the Electric Washers and Dryers; then the Arc Type of Printer, followed by the combination of the Printer, Washer and Dryer.

Kolesch & Co. have followed the various developments of blue printing equipment until now in **1932** our Blue Printing Department is equipped with machines that are the latest word in reproduction. Machines that have the feature of revolving glass cylinders with arc light built on the inside of the cylinder. The Blue Print Paper and tracing are revolved with the cylinder, assuring perfect contact for reproducing the minutest detail. Wear and tear or smearing and smudging of tracings are negligible. Prints are washed in water, developed in Potash and then washed front and back by fresh water producing white lines and good deep blue with a minimum of variation, then around the drying oven to the trimming tables. Our modern equipment and establishment is always ready to serve the engineer with dispatch and accuracy.

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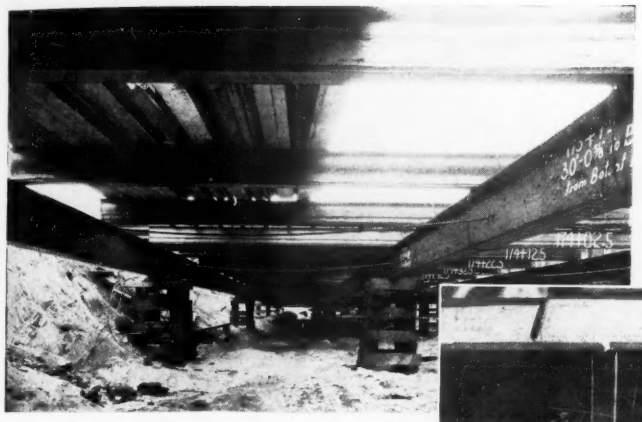
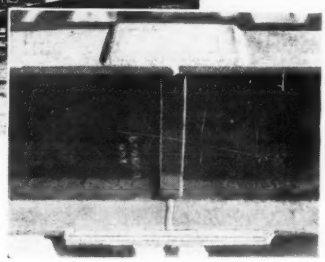


Concourse subway of New York City, tied together by welding.

8,448 tons of steel required, 59,840 lineal feet of 3/8" welds.

Can be had in any part of the United States. We are prepared to submit bids and complete structural welding work anywhere in this country. Photographs show examples of our work in both New York and Chicago.



Lower photograph shows a 500 ton railroad life bridge over Chicago River, repaired by welding.

The cable sheaves of this bridge were repaired by welding. The work was completed without any interruption of traffic.

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